

### ABSTRACT

A temperature compensated variable tilt equalizer configured to operate over a defined frequency range. The equalizer includes an RF input, an automatic temperature compensation circuit and a manual alignment circuit. The RF input receives an RF signal having a wide passband. The automatic temperature compensation circuit has an adjustable compensation range used to correct temperature-related tilt variances that occur on the passband of the RF signal over the defined frequency range. The manual alignment circuit is used to manually adjust tilt of the passband of the RF signal over the defined frequency range at a normal temperature. The variable tilt equalizer does not require a power source other than the RF signal.